

Imagine...

"Next Generation" Options for Natural Gas

Coal & Power Systems

	FY 2001 Request
Central Systems	
- Innovations for Existing Plants	\$ 18.2
- Indirect Cycles	2.0
- Gasification Cycles	32.0
- Pres. Fluidized Bed	11.2
- Turbines	26.0
Distributed Systems	
- Fuel Cells	42.2
Sequestration	19.5
Fuels	15.7
Advanced Research	<u>27.0</u>
Total	\$ 193.8

Dollars in Millions

New Gas Turbines - Breaking efficiency records (60%), emissions less than half today's averages

- ▶ GE 7H Turbine on Test Stand; 1st Sale Goes to New York Power Plant
- ▶ FY01 Program Begins Shift to Mid-Size Turbine; Could be 50% of Future Market

Lower Cost Fuel Cells - Pushing efficiencies to 80%+

- ▶ Redesigned fuel cell to be tested in Los Angeles
- ▶ Hybrid fuel cell/micro-turbine to be tested at UC-Irvine
- ▶ Companies continue applying new designs and advances from microchip industry. Goal: 1/3rd today's cost
- ▶ National lab "strategic alliance" to encourage high-volume solid state manufacturing

